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=> file agricola caplus biosis

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=> s act2 or act 2 or actin 2 or actin2
L1 469 ACT2 OR ACT 2 OR ACTIN 2 OR ACTIN2

=> s l1 and promoter
L2 64 L1 AND PROMOTER

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 52 DUP REM L2 (12 DUPLICATES REMOVED)

=> d 1-10 ti

L3 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Method of controlling transgene expression and cellular process in plants by externally applied signal

L3 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Method of switching on cellular processes in plants by externally applied polypeptides

L3 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Method of controlling cellular process in plants by externally applied signal

L3 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Chimeric proteins comprising lectin carbohydrate-binding domain and cell surface protein ligand for modulating immune response to antigen

L3 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Use of the fluorescent timer DsRED-E5 as reporter to monitor dynamics of gene activity in plants

L3 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
TI A ROS Repressor-mediated Binary Regulation System for Control of Gene Expression in Transgenic Plants

L3 ANSWER 7 OF 52 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI Cav1.2 mediates smooth muscle contractile protein gene expression via Rho kinase.

L3 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Use of corn cytoplasmic glutamine synthetase gene **promoter** for transgenic expression in female reproductive tissue

L3 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Heat-stable, protease-resistant chaperonin-like oligomeric proteins of plants, cDNAs encoding them and their use in the expression of foreign genes in plants

L3 ANSWER 10 OF 52 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI Maize promoters.

=> d ab

L3 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
AB The invention relates to a method of controlling a genetically-modified multi-cellular organism or a part thereof. The method comprises the following steps: (a) providing a multi-cellular organism or a part

thereof, whereby cells of said multi-cellular organism or said part contain a heterologous nucleic acid, (b) causing expression of a I protein from said heterologous nucleic acid in at least some of said cells, wherein said protein is capable of (i) leaving a cell and entering other cells of said multi-cellular organism or a part thereof, (ii) causing expression of said protein in cells containing said heterologous nucleic acid, and optionally (iii) controlling a cellular process of interest. The invention relates to detection of the amplification and movement of a protein switch using a Gus test construct stably integrated into the plant genome. The invention relates to use of a protein switch containing a site-specific DNA recombinase capable of intercellular trafficking for assembling an amplicon from provector parts that are stably integrated into the plant genome. The vector contains a transformation marker (NPTII gene) and the 5' end of TMV (including the RNA dependent RNA polymerase [RdRp], the movement protein [MP] followed by a subgenomic **promoter**) preceded by the Arabidopsis **actin 2** **promoter**. The vector also contains the 3' end of the provector which contains the gene of interest (GFP), the viral coat protein (CP, providing for systemic movement), the 3'-nontranslated region of the viral vector (3' NTR) and a transcription terminator. The 3' provector part is flanked by LoxP sites in opposite orientation and is positioned on the vector in opposite orientation relative to the 5' provector.

=> d pi

L3 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004046361	A1	20040603	WO 2003-EP13021	20031120

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

=> d 2 ab

L3 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

AB The invention relates to a method of controlling a genetically-modified plant, comprising. The method consists of (a) providing a genetically-modified plant, whereby cells of said genetically-modified plant contain a heterologous nucleic acid and whereby said genetically-modified plant is inactive with regard to a cellular process of interest, (b) switching on said cellular process of interest by directly introducing a polypeptide from a cell-free composition into cells containing said heterologous nucleic acid wherein said polypeptide and said heterologous nucleic acid are mutually adapted such that said polypeptide is capable of switching on said cellular process of interest. The invention relates to uses of site-directed DNA recombination triggered by protein-switch to assemble amplified vector from provector parts stably integrated into the plant genome. The vector carries transformation marker (NPTII gene), the 5' end of TMV preceded by the plant **promoter** of the arabidopsis **actin 2** gene and contains an RNA dependent RNA polymerase (RdRp) and movement protein (MP) followed by a subgenomic **promoter**. The vector also contains 3' end of provector containing a gene of interest (GFP), viral coat protein (CP) providing for the systemic movement and 3'-nontranslated region of viral

vector (3'NTR). The 3' provector together with two transcription termination signals is flanked by recombination sites recognized by phage integrase phiC31. Exposure of transgenic plant leaves to cell-permeable integrase causes site-specific recombination between attP and attB sites. Such recombination leads to the reversion of 3' provector, thus creating a complete cDNA of a viral amplicon under the control of the **actin 2 promoter**.

=> d 2 pi

L3 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004046360	A2	20040603	WO 2003-EP13018	20031120
WO 2004046360	A3	20040812		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

=> d 3 ab

L3 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

AB The invention relates to a method of controlling a genetically-modified plant or plant cells. The methods consists of (a) providing a genetically-modified plant or plant cells containing a heterologous nucleic acid encoding a first polypeptide containing or consisting of a first fragment of a protein, (b) introducing a second polypeptide into cells of said genetically-modified plant or plant cells, said second polypeptide containing (i) a second fragment of said protein and (ii) a peptide sequence enabling the introduction of said second polypeptide into cells of said genetically-modified plant or plant cells, whereby said first fragment and said second fragment jointly generate a predetd. function of said protein only when jointly present. The invention relates to intein-mediated trans-splicing of GUS after Agrobacterium-mediated transient expression inplant cells. The invention relates to agro-delivery of the intein C-GUS3' fusion protein. The invention relates to use of site-specific DNA recombination to assemble amplifying vector from provector parts stably integrated into the plant genome. The vector carries a transformation marker (NPTII gene), the 5' end of TMV preceded by the plant **promoter** of the arabidopsis **actin 2** gene and contains an RNA dependent RNA polymerase (RdRp) and a movement protein (MP) followed by a subgenomic **promoter**. The vector also contains 3' end of the provector containing a gene of interest (GFP), viral coat protein (CP) providing for the systemic movement and 3'-nontranslated region of the viral vector (3'NTR). The 3' provector together with two transcription termination signals is flanked by recombination sites recognized by phage integrase phiC31.

=> d 3 pi

L3 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004046359	A2	20040603	WO 2003-EP13016	20031120

WO 2004046359 A3 20040826
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
DE 10254167 A1 20040609 DE 2002-10254167 20021120

=> d 4 ab

L3 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
AB The present invention provides a fusion polypeptide which can bind to a cell surface binding moiety (e.g., a carbohydrate) and server as a ligand for a cell surface polypeptide, as well as a vector comprising a nucleic acid encoding for such a fusion polypeptide, and a host cell comprising such nucleic acid. The lectin is collectin, galectin, C-type lectin or glycoprotein; and the cell surface protein is cytokine receptor, CD40, adhesion mol., defensin receptor, heat shock protein receptor, T cell costimulatory mol., counterreceptor of T cell costimulatory mol., or opsonin receptor. The present invention also provides a composition comprising an antigen bearing target and such a fusion polypeptide, as well as a composition comprising a virus or a cell and such a fusion polypeptide. The antigen is tumor antigen, viral antigen, bacterial antigen, fungal antigen, parasitic antigen, prion antigen, or autoimmune disease antigen. The present invention further relates to a method of modulating an immune response in an animal using such compns. or vaccines.

=> d 4 kwic

L3 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**ACT-2**; chimeric proteins comprising lectin carbohydrate-binding domain and cell surface protein ligand for enhancing immune response to vaccines against infection, cancer, prion disease and autoimmune disease)
IT Antigens
Chemokine receptors
Chemokines
Eotaxin
Eotaxin 2
Glycoproteins
Granulocyte-macrophage colony-stimulating factor receptors
Hemagglutinins
Interferon receptors
Interferons
Interleukin 1
Interleukin 10
Interleukin 12
Interleukin 13
Interleukin 14
Interleukin 15
Interleukin 16
Interleukin 17
Interleukin 18
Interleukin 19

Interleukin 2
Interleukin 20
Interleukin 24
Interleukin 3
Interleukin 4
Interleukin 5
Interleukin 6
Interleukin 7
Interleukin 8
Interleukin 9
Interleukin receptors
Ligands
Macrophage inflammatory protein 1α
Macrophage inflammatory protein 2
Monocyte chemoattractant protein-1
Monocyte chemoattractant protein-2
Monocyte chemoattractant protein-3
Monocyte chemoattractant protein-5
Neutrophil-activating peptide-2
Promoter (genetic element)
RANTES (chemokine)
Tumor necrosis factor receptors
Tumor necrosis factors
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chimeric proteins comprising lectin carbohydrate-binding domain and cell surface protein ligand for enhancing immune response to vaccines against infection, cancer, prion disease and autoimmune disease)

=> d 5 ab

L3 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
AB Fluorescent proteins, such as green fluorescent protein and red fluorescent protein (DsRED), have become frequently used reporters in plant biol. However, their potential to monitor dynamic gene regulation is limited by their high stability. The recently made DsRED-E5 variant overcame this problem. DsRED-E5 changes its emission spectrum over time from green to red in a concentration independent manner. Therefore, the green to red fluorescence ratio indicates the age of the protein and can be used as a fluorescent timer to monitor dynamics of gene expression. Here, we analyzed the potential of DsRED-E5 as reporter in plant cells. We showed that in cowpea (Vigna unguiculata) mesophyll protoplasts, DsRED-E5 changes its fluorescence in a way similar to animal cells. Moreover, the timing of this shift is suitable to study developmental processes in plants. To test whether DsRed-E5 can be used to monitor gene regulation in plant organs, we placed DsRED-E5 under the control of promoters that are either up- or down-regulated (MtACT4 and LeEXT1 promoters) or constitutively expressed (MtACT2 **promoter**) during root hair development in Medicago truncatula. Anal. of the fluorescence ratios clearly provided more accurate insight into the timing of **promoter** activity.

=> d 5 pi

L3 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

=> d 5 so

L3 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
SO Plant Physiology (2004), 135(4), 1879-1887
CODEN: PLPHAY; ISSN: 0032-0889

=> d 6 ab

L3 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
AB We describe a novel binary system to control transgene expression in plants. The system is based on the prokaryotic repressor, ROS, from Agrobacterium tumefaciens, optimized for plant codon usage and for nuclear targeting (synROS). The ROS protein bound in vitro to double stranded DNA comprising the ROS operator sequence, as well as to single stranded ROS operator DNA sequences, in an orientation-independent manner. A synROS-GUS fusion protein was localized to the nucleus, whereas wtROS-GUS fusion remained in the cytoplasm. The ability of synROS to repress transgene expression was validated in transgenic Arabidopsis thaliana and Brassica napus. When expressed constitutively under the **actin2 promoter**, synROS repressed the expression of the reporter gene gusA linked to a modified CaMV35S **promoter** containing ROS operator sequences in the vicinity of the TATA box and downstream of the transcription initiation signal. Repression ranged from 32 to 87% in A. thaliana, and from 23 to 76% in B. napus. These results are discussed in relation to the potential application of synROS in controlling the expression of transgenes and endogenous genes in plants and other organisms.

=> d 6 so

L3 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
SO Transgenic Research (2004), 13(2), 109-118
CODEN: TRSEES; ISSN: 0962-8819

=> d 11-20 ti

L3 ANSWER 11 OF 52 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI Maize A3 **promoter** and methods for use thereof.

L3 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
TI Multiple conserved 5' elements are required for high-level pollen expression of the Arabidopsis reproductive actin ACT1

L3 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3
TI An Arabidopsis **ACT2** dominant-negative mutation, which disturbs F-actin polymerization, reveals its distinctive function in root development

L3 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
TI Ral GDP Dissociation Stimulator and Ral GTPase Are Involved in Myocardial Hypertrophy

L3 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
TI Transformation of peanut using a modified bacterial mercuric ion reductase gene driven by an actin **promoter** from Arabidopsis thaliana

L3 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Heat-stable, protease-resistant chaperonin-like oligomeric proteins of plants, cDNAs encoding them and their use in the expression of foreign genes in plants

L3 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI A bi-directional dual **promoter** complex with enhanced **promoter** activity for transgene expression in eukaryotes

L3 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Use of arsenate reductase, γ-glutamylcysteine synthase, glutathione synthase or phytochelatin synthase for heavy metal resistance of transgenic plants and phytoremediation of environmental contamination

L3 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Crucifer tobamovirus vector containing internal ribosome entry sites for cap-independent translation of heterologous genes in transgenic plants

L3 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Construction of regulated systems in plants using multiple transformations using infection with a plant viral vector to initiate regulated processes

=> d 8 so

L3 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
SO U.S. Pat. Appl. Publ., 62 pp.
CODEN: USXXCO

=> d 8 pi

L3 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003140364	A1	20030724	US 2001-989739	20011120

=> d 15 ab

L3 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
AB In order to test an alternative selectable marker system for the production of transgenic peanut plants (Arachis hypogaea), the bacterial mercuric ion reductase gene, merA, was introduced into embryogenic cultures via microprojectile bombardment. MerA reduces toxic Hg(II) to the volatile and less toxic metallic mercury mol., Hg(0), and renders its source Gram-neg. bacterium mercury resistant. A codon-modified version of the merA gene, MerApe9, was cloned into a plant expression cassette containing the **ACT2 promoter** from Arabidopsis thaliana and the NOS terminator. The expression cassette also was inserted into a second vector containing the hygromycin resistance gene driven by the UBI3 **promoter** from potato. Stable transgenic plants were recovered through hygromycin-based selection from somatic embryo tissues bombarded with the plasmid containing both genes. However, no transgenic somatic embryos were recovered from selection on 50-100 μmol/L HgCl2. Expression of merA as mRNA was detected by Northern blot anal. in leaf tissues of transgenic peanut, but not in somatic embryos. Western blot anal. showed the production of the mercuric ion reductase protein in leaf tissues. Differential responses to HgCl2 of embryo-derived explants from segregating R1 seeds of one transgenic line also were observed

=> d 15 so

L3 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
SO Journal of Plant Physiology (2003), 160(8), 945-952
CODEN: JPPHEY; ISSN: 0176-1617

=> d 21-30 ti

L3 ANSWER 21 OF 52 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

TI Rice **actin 2 promoter** and intron and methods for use thereof.

L3 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Both vegetative and reproductive actin isovariants complement the stunted root hair phenotype of the Arabidopsis **act2**-1 mutation

L3 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Engineering tolerance and hyperaccumulation of arsenic in plants by combining arsenate reductase and γ-glutamylcysteine synthetase expression

L3 ANSWER 24 OF 52 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI High level arsenic and mercury resistance in plants overexpressing bacterial gamma-glutamylcysteine synthetase.

L3 ANSWER 25 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Hypoxic regulation of inducible nitric oxide synthase via hypoxia inducible factor-1 in cardiac myocytes. [Erratum to document cited in CA132:277525]

L3 ANSWER 26 OF 52 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI Cis-acting elements, CArG-, E-, CCAAT- and TATA-boxes may be involved in sexually regulated gene transcription in Schistosoma mansoni.

L3 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Maize glycine-rich protein **promoter** compositions and methods for its use in plant transformation

L3 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Promoters of Arabidopsis actin and elongation factor EF1α genes and their use in driving expression of herbicide resistance genes in transgenic plants

L3 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Increasing the efficiency of photosynthetic carbon fixation in plants by increasing bicarbonate uptake

L3 ANSWER 30 OF 52 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI Maize A3 **promoter** and methods for use thereof.

=> d 31-40 ti

L3 ANSWER 31 OF 52 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN DUPLICATE 6
TI One plant actin isovariant, ACT7, is induced by auxin and required for normal callus formation.

L3 ANSWER 32 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 7
TI Expression of a bifunctional green fluorescent protein (GFP) fusion marker under the control of three constitutive promoters and enhanced derivatives in transgenic grape (Vitis vinifera)

L3 ANSWER 33 OF 52 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI Expression of a GFP fusion marker under the control of three constitutive promoters and enhanced derivatives in transgenic grape.

L3 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Maize RS81 **promoter** and methods for its use in plant transformation

L3 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Maize RS81 **promoter** and methods for its use in plant transformation

L3 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI The rice **actin 2 promoter** and intron and their use for plant transformation

L3 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Maize RS324 **promoter** and methods for its use in plant transformation

L3 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Transgenic plants expressing genes for enzymes of methionine biosynthesis showing improved tolerance of stress conditions

L3 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Regulation of viral gene expression by sense and antisense-expressing cassettes forming double-stranded RNA

L3 ANSWER 40 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Use of Arabidopsis **ACT2** gene **promoter** for gene expression in Compositae

=> d 41-52 ti

L3 ANSWER 41 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Novel maize promoters for constitutive gene expression in transgenic plants

L3 ANSWER 42 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Arabidopsis DNA encoding a Mg2+, Zn2+/H+ exchanger, and transgenic plants with enhanced stress tolerance

L3 ANSWER 43 OF 52 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
TI The Arabidopsis thaliana ACT4/ACT12 actin gene subclass is strongly expressed throughout pollen development.

L3 ANSWER 44 OF 52 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN DUPLICATE 8
TI Strong, constitutive expression of the Arabidopsis **ACT2**/ACT8 actin subclass in vegetative tissues.

L3 ANSWER 45 OF 52 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
TI Conserved expression of the Arabidopsis ACT1 and ACT3 actin subclass in organ primordia and mature pollen.

L3 ANSWER 46 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Inhibitors of stem cell proliferation

L3 ANSWER 47 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 9

TI Activator region analysis of the human D1A dopamine receptor gene

L3 ANSWER 48 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Differential detection of multiple DNA-binding complexes using dissimilar polyanion competitors

L3 ANSWER 49 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Rice actin gene and **promoter** and 5' intron for heterologous gene expression

L3 ANSWER 50 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 10
TI The gene encoding the **Act-2** cytokine. Genomic structure, HTLV-I/Tax responsiveness of 5' upstream sequences, and chromosomal localization

L3 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
TI Cloning and expression of a lymphocyte activation gene (LAG-1)

L3 ANSWER 52 OF 52 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
TI Multiple conserved 5' elements are required for high-level pollen expression of the Arabidopsis reproductive actin ACT1.

=> s arabidopsis act2 or arabidopsis actin 2 or arabidopsis act 2
L4 21 ARABIDOPSIS ACT2 OR ARABIDOPSIS ACTIN 2 OR ARABIDOPSIS ACT 2

=> dup rem l4
PROCESSING IS APPROXIMATELY 61% COMPLETE FOR L4
PROCESSING COMPLETED FOR L4
L5 16 DUP REM L4 (5 DUPLICATES REMOVED)

=> d 1-10 ti

L5 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN
TI Method of controlling transgene expression and cellular process in plants by externally applied signal

L5 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN
TI Method of switching on cellular processes in plants by externally applied polypeptides

L5 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN
TI Method of controlling cellular process in plants by externally applied signal

L5 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
TI An **Arabidopsis ACT2** dominant-negative mutation, which disturbs F-actin polymerization, reveals its distinctive function in root development

L5 ANSWER 5 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI Detection of deleterious genotypes in multigenerational studies. III. Estimation of selection components in highly selfing populations.

L5 ANSWER 6 OF 16 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN DUPLICATE 2
TI Both vegetative and reproductive actin isovariants complement the stunted root hair phenotype of the **Arabidopsis act2**-1

mutations.

L5 ANSWER 7 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI High level arsenic and mercury resistance in plants overexpressing bacterial gamma-glutamylcysteine synthetase.

L5 ANSWER 8 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI One plant actin isovariant, ACT7, is induced by auxin and required for normal callus formation.

L5 ANSWER 9 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
TI Functional non-equivalency of actin isovariants in Arabidopsis.

L5 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN
TI Regulation of viral gene expression by sense and antisense-expressing cassettes forming double-stranded RNA

=> d 5 kwic

L5 ANSWER 5 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
GEN **Arabidopsis ACT2** gene (Cruciferae): actin gene

=> d 5 ab

L5 ANSWER 5 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
AB New paradigms in genetics have increased the chance of finding genes that appear redundant but in fact may have been preserved due to a small level of positive selection potential acting during each generation. Monitoring changes in genotypic frequencies within and between generations allows the dissection of the fertility, viability and meiotic drive selection components acting on such genes in natural and experimental populations. Here, a formal maximum likelihood procedure is developed to identify and estimate these selection components in highly selfing populations by fitting the time-dependent solutions for genotypic frequencies to observed multigenerational counts. With adult census alone, we can not simultaneously estimate all three selection components considered. In such cases, we instead consider a hierarchy of 11 models with either fewer selection components, complete dominance, or multiplicative meiotic drive with a single parameter. We identify the best-fitting of these models by applying likelihood ratio tests to nested models and Akaike's Information Criterion (AIC) and the Bayesian Information Criterion (BIC) to non-nested models. With seed census, fertility and viability selection are not distinguishable and thus can only be estimated jointly. A combination of joint seed and adult census data allows us to estimate all three selection components simultaneously. Simulated data validate the estimation procedure and provide some practical guidelines for experimental design. An application to Arabidopsis data establishes that viability selection is the major selective force acting on the ACT2 actin gene in laboratory-grown Arabidopsis populations.

=> d 7 ab

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L5 ANSWER 7 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

SO Plant Biology (Rockville), (2002) Vol. 2002, pp. 153-154. print.
Meeting Info.: Annual Meeting of the American Society of Plant Biologists on Plant Biology. Denver, CO, USA. August 03-07, 2002. American Society of Plant Biologists.

=> d 8 ab

L5 ANSWER 8 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

AB During plant growth and development, the phytohormone auxin induces a wide array of changes that include cell division, cell expansion, cell differentiation, and organ initiation. It has been suggested that the actin cytoskeleton plays an active role in the elaboration of these responses by directing specific changes in cell morphology and cytoarchitecture. Here we demonstrate that the promoter and the protein product of one of the Arabidopsis vegetative actin genes, ACT7, are rapidly and strongly induced in response to exogenous auxin in the cultured tissues of Arabidopsis. Homozygous act7-1 mutant plants were slow to produce callus tissue in response to hormones, and the mutant callus contained at least two to three times lower levels of ACT7 protein than did the wild-type callus. On the other hand, a null mutation in ACT2, another vegetative actin gene, did not significantly affect callus formation from leaf or root tissue. Complementation of the act7-1 mutants with the ACT7 genomic sequence restored their ability to produce callus at rates similar to those of wild-type plants, confirming that the ACT7 gene is required for callus formation. Immunolabeling of callus tissue with actin subclass-specific antibodies revealed that the predominant ACT7 is coexpressed with the other actin proteins. We suggest that the coexpression, and probably the copolymerization, of the abundant ACT7 with the other actin isovariants in cultured cells may facilitate isovariant dynamics well suited for cellular responses to external stimuli such as hormones.

=> d 8 so

L5 ANSWER 8 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

SO Plant Cell, (July, 2001) Vol. 13, No. 7, pp. 1541-1554. print.
CODEN: PLCEEW. ISSN: 1040-4651.

=> d 9 ab

L5 ANSWER 9 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

=> d 9 so

L5 ANSWER 9 OF 16 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

SO Molecular Biology of the Cell, (Nov, 2001) Vol. 12, No. Supplement, pp. 33a. print.
Meeting Info.: 41st Annual Meeting of the American Society for Cell Biology. Washington DC, USA. December 08-12, 2001. American Society for Cell Biology.
CODEN: MBCEEV. ISSN: 1059-1524.

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REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):ab

L5   ANSWER 10 OF 16  CAPLUS  COPYRIGHT 2004 ACS on STN
AB   The present invention relates to methods to alter the expression of a
     viral gene in a cell using sense and antisense RNA fragments of the gene.
     The sense and antisense RNA fragments are capable of pairing and forming a
     double-stranded RNA mol., thereby altering the expression of the gene.
     The present invention also relates to cells, plants or animals, their
     progeny and seeds derived thereof, obtained using a method of the present
     invention.  Preferably, such cells, plants or animals are resistant or
     tolerant to viruses.  The method is exemplified by construction of (1) a
     chimeric gene cassette encoding a sense and antisense RNA fragment for the
     coat protein from beet western yellows virus driven by the RolC promoter,
     (2) a cassette for the replicase gene from beet necrotic yellow vein virus
     driven by the Arabidopsis Ubi3int promoter, (3) a plant transformation
     vector for zucchini yellow mosaic potyvirus and papaya ringspot potyvirus
     resistance in melon, and (4) a plant transformation vector for potato
     virus Y resistance in tomato.


=> d 10 pi

L5   ANSWER 10 OF 16  CAPLUS  COPYRIGHT 2004 ACS on STN
     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
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             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2369422             AA    20001116    CA 2000-2369422          20000508
     EP 1177283             A1    20020206    EP 2000-927165           20000508
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     BR 2000010496          A     20020402    BR 2000-10496            20000508
     TR 200103088           T2    20020521    TR 2001-200103088        20000508
     JP 2002543783          T2    20021224    JP 2000-616341           20000508
     ZA 2001009152          A     20020906    ZA 2001-9152             20011106


=> d 11-16 ti

L5   ANSWER 11 OF 16  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Use of Arabidopsis ACT2 gene promoter for gene
     expression in Compositae

L5   ANSWER 12 OF 16  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Arabidopsis DNA encoding a Mg2+, Zn2+/H+ exchanger, and transgenic plants
     with enhanced stress tolerance

L5   ANSWER 13 OF 16  BIOSIS  COPYRIGHT (c) 2004 The Thomson Corporation.  on
     STN
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TI Detection of deleterious genotypes in multigenerational studies: II. Theoretical and experimental dynamics with selfing and selection.

L5 ANSWER 14 OF 16 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN

TI The Arabidopsis thaliana ACT4/ACT12 actin gene subclass is strongly expressed throughout pollen development.

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TI Strong, constitutive expression of the **Arabidopsis ACT2** /ACT8 actin subclass in vegetative tissues.

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TI An **Arabidopsis ACT2** dominant-negative mutation, which disturbs F-actin polymerization, reveals its distinctive function in root development.

=> d 11 pi

L5 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000037661	A1	20000629	WO 1999-GB4317	19991216

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

=> d 12 ab

L5 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

AB A gene coding for a polypeptide of the 11-12 transmembrane domain transporter family having a Mg2+/H+ or Zn2+/H+ exchange activity, herein designated MHX was cloned from Arabidopsis thaliana cv. C-24. An expression vector was constructed from the cloned cDNA with CaMV35S promoter, omega sequence, and nopaline synthase (nos) polyadenylation and termination signal. Transgenic tobacco plants transformed with the expression vector for MHX are shown to have a lower sodium content as compared with corresponding wild-type plants or a higher dry matter weight upon growth in calcium-rich media as compared with corresponding wild-type plants. These transgenic plants are more tolerant to stress conditions, particularly high salinity and calcium-rich media, e.g. saline and calcareous soils.

=> d 12 so

L5 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

SO PCT Int. Appl., 52 pp.

CODEN: PIXXD2

=> d 12 pi

L5 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9961616	A2	19991202	WO 1999-IL277	19990525
	WO 9961616	A3	20000413		
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	AU 9940562	A1	19991213	AU 1999-40562	19990525
	US 6677506	B1	20040113	US 2000-701068	20001124

=> d 14 ab

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AB Plants contain complex actin gene families composed of several diverse and ancient subclasses of genes. One Arabidopsis actin gene subclass represented by the ACT4 and ACT12 genes has been isolated and characterized. Both actin genes have typical plant actin gene structures, including three small introns interrupting the coding region and an intron within the mRNA leader. Their encoded proteins differ from each other in only one amino acid, whereas they differ in 3-10% of their amino acids from the other five Arabidopsis actin subclasses. They also share a few small blocks of DNA sequence homology in the 5' flanking region near their TATA boxs, but not in their introns, 3' flanking regions, or degenerate positions within codons. Southern analysis with genes-pecific probes from 5' flanking sequences showed that both were single copy genes in the genome. Both RNA gel blot analysis with 3' gene-speclfic probes and reverse transcriptase-mediated polymerase chain reactions (RT-PCR) with gene-specific primers detected low levels of ACT4 and ACT12 mRNAs in flowers and very high levels in pollen. The RT-PCR detected very low levels of these mRNAs in the vegetative organs. The 5' region from both genes, including the promoter region, TATA box, the sequence for the mRNA leader and its intron, and the first 19 actin codons, was fused to a beta-glucuronidase (GUS) reporter gene. Expression of the GUS fusions were examined histochemically in 40 independent transgenic Arabidopsis plants. Expression of the ACT4/GUS fusion was restricted to young vascular tissues, tapetum, and developing and mature pollen. Similar expression patterns in these tissues and cell types were observed for ACT12/GUS fusion, yet unlike ACT4, ACT12 was also strongly expressed in the root cap and in a ring of pericycle tissues during lateral root initiation and early development. The unique expression patterns of the ACT4/ACT12 actin gene subclass are discussed in light of recent data on the other expressed members of the Arabidopsis actin gene family.

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SO The Plant journal : for cell and molecular biology, Aug 1996. Vol. 10, No. 2. p. 189-202
Publisher: Oxford : BIOS Scientific Publishers Ltd and Blackwell Sciences Ltd.
ISSN: 0960-7412

=> d 15 ab

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AB Arabidopsis has a complex and ancient actin gene family encoding six divergent subclasses of proteins. One sub-class is represented by ACT2 and ACT8, which encode nearly identical proteins. These two genes differ significantly in flanking and intron sequences and in silent nucleotide positions within codons. Gene-specific RNA gel blot hybridization and reverse transcriptase-mediated polymerase chain reaction (RT-PCR) assays showed that ACT2 and/or ACT8 mRNAs were coordinately and strongly expressed in leaves, roots, stems, flowers, pollen, and siliques. Together they account for greater than 80% of the actin mRNA in most Arabidopsis organs. The 5' flanking regions, including the promoter, the mRNA leader exon, an intron in the mRNA leader, and the first 19 codons, were coupled to a beta-glucuronidase (GUS) reporter gene and transformed into Arabidopsis. The ACT2/GUS construct was expressed strongly in nearly all the vegetative tissues in seedlings, juvenile plants, and mature plants. These activities persisted in older tissues. Little or no expression was observed in seed coats, hypocotyls, gynoecia, or pollen sacs. In contrast, the expression of the ACT8/GUS construct was weaker. It was observed only in a subset of the organs and tissues expressing ACT2/GUS and was not significantly expressed in the flower. ACT2, ACT8, and ACT8/GUS mRNAs were present at moderate to high levels in pollen, and yet neither ACT2/GUS nor ACT8/GUS enzyme expression could be detected in pollen. This suggested a mechanism of translational control affecting ACT2 and ACT8 expression in some tissues. The conservation of protein sequence and overlapping patterns of expression, in spite of significant DNA sequence divergence, suggests that the function and regulation of these two genes have been conserved during the evolution of the Brassicaceae.

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SO The Plant journal : for cell and molecular biology, July 1996. Vol. 10, No. 1. p. 107-121
Publisher: Oxford : BIOS Scientific Publishers Ltd and Blackwell Sciences Ltd.
ISSN: 0960-7412

=> d 15 au

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AU An, Y.Q.; McDowell, J.M.; Huang, S.; McKinney, E.C.; Chambliss, S.; Meagher, R.B.

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=> d 16 ab

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     (2004) on STN
AB   Copy abstract


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     (2004) on STN
SO   Plant and cell physiology, p. 1131-1140
     ISSN: 0032-0781


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in at least one of the files.  Refer to file specific help messages
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individual files.
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in at least one of the files.  Refer to file specific help messages
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L5   ANSWER 1 OF 16  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Method of controlling transgene expression and cellular process in plants
     by externally applied signal


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L5           16 DUP REM L4 (5 DUPLICATES REMOVED)

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=> s l4 and (compositae or lettuce or sunflower)
L6            1 L4 AND (COMPOSITAE OR LETTUCE OR SUNFLOWER)

=> d ti

L6   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Use of Arabidopsis ACT2 gene promoter for gene
     expression in Compositae
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L6   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2004 ACS on STN
     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
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PI   WO 2000037661         A1    20000629    WO 1999-GB4317           19991216
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L8   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Use of Arabidopsis ACT2 gene promoter for gene expression in
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L9          24 ((VAN DUN, C?) OR (VAN DUN C?))/AU

=> s l9 and (act2 or act 2 or actin 2 or actin2)
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L10  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Use of Arabidopsis ACT2 gene promoter for gene expression in
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=> d ti

L12  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Use of Arabidopsis ACT2 gene promoter for gene expression in
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☐	L7	actin2 promoter or act2 promoter or act 2 promoter	48
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END OF SEARCH HISTORY